Candida auris

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NEVADA DIVISION of PUBLIC and BEHAVIORAL HEALTH

ALL IN GOOD HEALTH.

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ABOUT DPBH

MISSION

To protect, promote, and improve the physical and behavioral health and safety of all people in Nevada, equitably and regardless of circumstances, so they can live their safest, longest, healthiest, and happiest life.

VISION

A Nevada where preventable health and safety issues no longer impact the opportunity for all people to live life in the best possible health.

PURPOSE

To make everyone's life healthier, happier, longer, and safer.

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AGENDA

1. Understand what is Candida *auris*
2. High-level overview of Candida *auris* in Nevada
3. Discuss ongoing efforts to combat C. *auris* in Nevada
4. Review testing guidance
5. Review best practices to prevent transmission of C. *auris*
6. Review reporting requirements for C. *auris*

What is Candida auris?

What is Candida *auris*?

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Candida *auris (*C. *auris)* is an emerging fungus that presents a serious global health threat according to the Centers for Disease Control and Prevention (CDC).

C. *auris* is concerning for three main reasons.

- Often multidrug-resistant, some strains are resistant to all three available classes of antifungals.
- Is difficult to identify with standard laboratory methods and can be misidentified when specific technology is not available.
- Has caused outbreaks in healthcare settings. Quick identification in hospitalized patients is important to stop the spread.

What is Candida *auris*?

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There are two ways to identify C. *auris* in a patient

- Colonization screening- swabbing patients' skin near the armpits and groin area.
- Clinical specimen- a collection of a clinical sample such as blood and urine for a patient showing symptoms of an infection of unknown cause.

Once a patient tests positive for C. *auris* colonization or infection CDC does not recommend retesting to change infection control measures.

Who's at risk?

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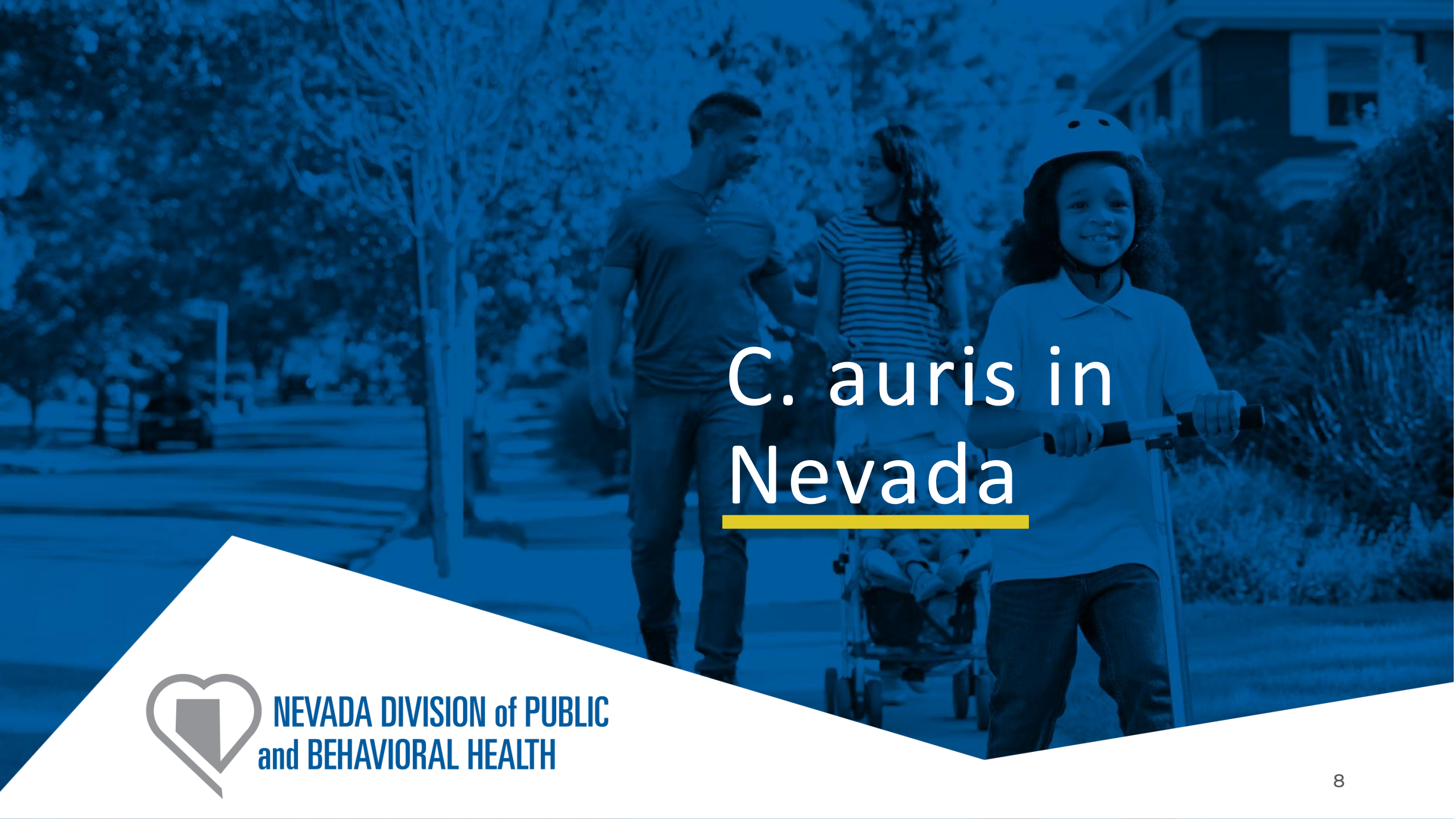
- According to the CDC, C. *auris* is not a threat to healthy people.
- Patients at risk are those who have the following:
  - Severe underlying medical conditions
  - Require complex medical care
  - Invasive medical devices
    - Breathing tubes
    - Feeding tubes
    - Catheters in a vein
    - Urinary catheters



C. auris in Nevada

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A high-level overview

- In April 2022, the Nevada Division of Public and Behavioral Health(DPBH) alerted health care facilities of identified cases, provided education and guidance on C. *auris*, and requested that facilities report their cases to DPBH.
- In May 2022, DPBH requested assistance from the Centers for Disease Control and Prevention to respond to identified cases in Southern Nevada.
- Through the coordinated response with the CDC, expanded testing has occurred and the State continues to work with facilities to conduct screenings and early detection of C. *auris*.

A high-level overview

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At the time this presentation was created 851 clinical cases and 1,268 colonized cases have been reported to DPBH.

	Acute Care Hospital	Ventilator Equipped Skilled Nursing Facility	Skilled Nursing Facility	Long-Term Acute Care Hospital	Other (e.g. private provider's office, laboratory report without a facility type)
Clinical	616	0	25	173	37
Colonized	528	146	77	484	33
Total	1144	146	102	657	70

A high-level overview

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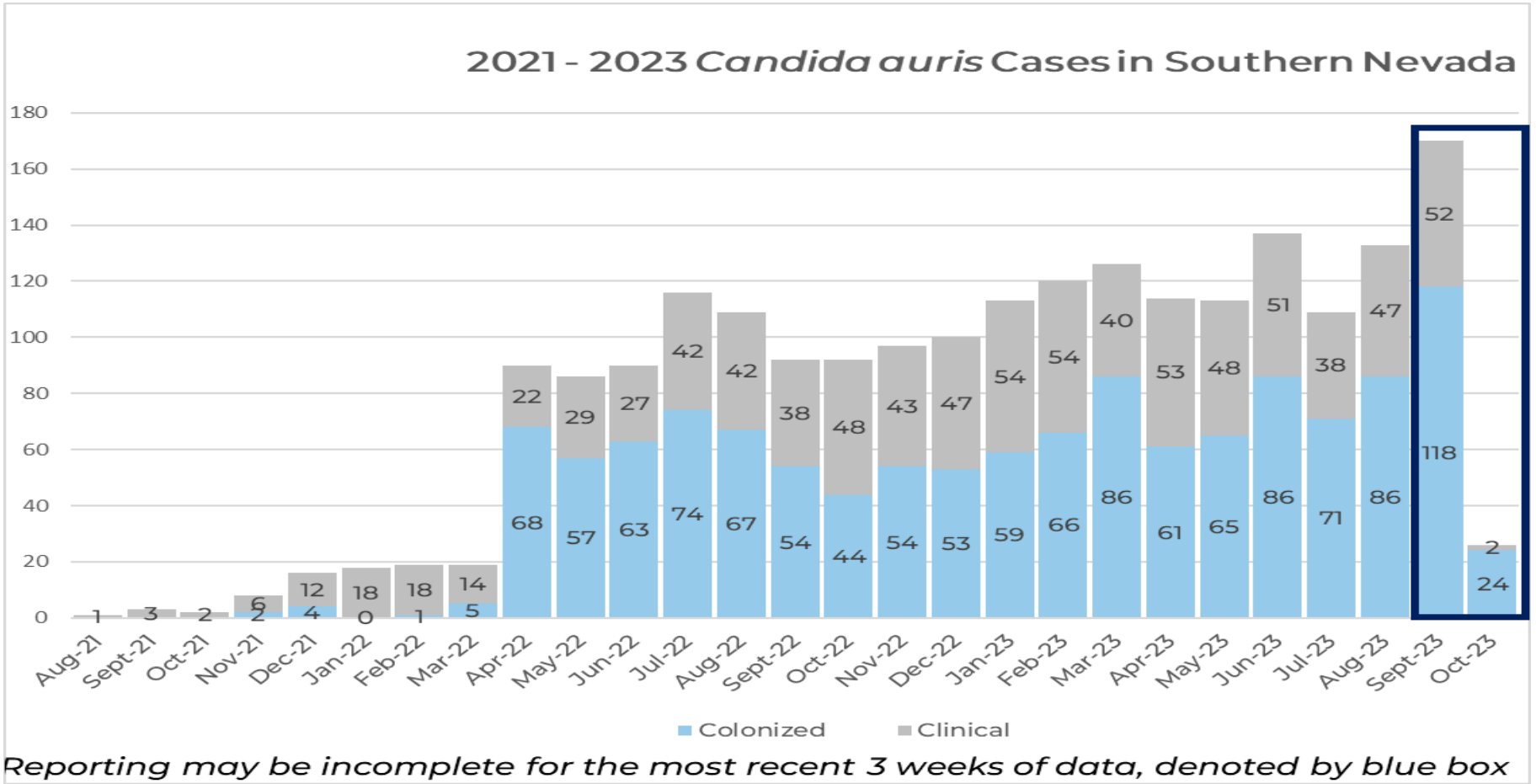

Ongoing efforts to combat C. *auris* in Nevada

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Investigation

- Reported cases are investigated and tracked through the healthcare system to identify close contacts and alert facilities.
- Facilities with identified cases receive education and onsite visits when deemed necessary.
- Healthcare Associated Infection (HAI) Program leads work closely with facilities to provide guidance and resources.

Communication

- The HAI Program publishes a monthly memo to state staff, local health authorities, stakeholders, and healthcare facilities with details on case counts, deaths, links to education, facilities with identified cases, an epi curve, and contact information for the HAI Program.

Ongoing efforts to combat C. auris in Nevada

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- Testing materials are available through the Nevada State Public Health Lab (NSPHL) at no cost to the facility.
- NSPHL also tests and provides results within 24-48 hours after receiving the specimen.
  - Delays to results can occur if the specimen is sent to the regional lab in Washington.
- Utilizing the external supply order form to order supplies as needed.

Ongoing efforts to combat C. auris in Nevada

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NEVADA STATE HEALTH LABORATORY

1660 NORTH VIRGINIA STREET
RENO, NV 89503
Phone: (775) 688-1335 Fax: (775) 688-1460
DIRECTOR: Mark Pandori PhD HCLD(ABB)

Name *

First Name Last Name

Email *

Phone *

Facility Name? *

Would you like your order shipped or will you be picking it up? *

- ○ Shipped
- ○ Picked up

Type of Test/Supply * **Quantity** *

Type of Test/Supply - 2 **Quantity - 2**

Infection Prevention Measures

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Standard Precautions

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Standard precautions must be used with every patient regardless of the suspected or confirmed infection status of the patient, in any setting where health care is delivered.

Standard precautions include the following:

- Hand hygiene
- Use of personal protective equipment (e.g., gloves, masks, eyewear).
- Respiratory hygiene/cough etiquette.
- Sharps safety (engineering and work practice controls).
- Safe injection practices (i.e., aseptic technique for parenteral medications).
- Sterile instruments and devices.
- Clean and disinfect environmental surfaces.

Hand Hygiene

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Use an Alcohol-Based Hand Rub (ABHR) 60% alcohol

- Immediately before touching a patient
- Before performing an aseptic task (e.g., placing an indwelling device) or handling invasive medical devices
- Before moving from work on a soiled body site to a clean body site on the same patient
- After touching a patient or the patient's immediate environment
- After contact with blood, body fluids, or contaminated surfaces

Wash with soap and water

- After known or suspected exposure to spores (e.g. B. anthracis, C difficile outbreaks)
- After caring for a person with known or suspected infectious diarrhea
- When hands are visibly soiled

ABHR is the preferred method for hand hygiene!
Wearing gloves is not a substitute for hand hygiene!

Contact Precautions

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Specific to C. *auris* contact precautions must be used in the acute care and long-term acute care environments. Unless Enhanced Barrier Precautions (EBP) are appropriate, contact precautions should be used in skilled nursing environments as well.

- **Patient placement**: Single room or appropriate cohorting.
- **Use PPE appropriately**: gowns and gloves should be used for all patient interactions that may involve contact with the patient or their environment.
- Perform hand hygiene and don PPE before entering the patient room.
- Remove and dispose of used PPE and perform hand hygiene before exiting the patient's room.

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Contact Precautions

- **Limit transport and movement of the patient:** if patient movement is necessary, make sure infected or colonized areas of the patient's body are covered and PPE is used appropriately.
- **Use disposable or dedicated equipment:** if equipment must be reused make sure it is cleaned and disinfected using EPA List P products. If List P is not available, use List K.
- Prioritize cleaning and disinfection of the rooms:
  - Clean and disinfect rooms at least daily.
  - Focus on frequently touched areas and equipment close to the patient.
  - Terminally clean the room prior to use by another patient.
  - Use EPA List P or List K products.

Enhanced Barrier Precautions

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- Refer to the use of gown and gloves during high-contact resident care when contact precautions do not otherwise apply.
- EBP may be indicated for residents with any of the following:
  - Wounds or indwelling medical devices, regardless of MDRO colonization status (Wounds must be covered. If wound status changes restrict movement until contained).
  - Infection or colonization with an MDRO.
  - Ensure your staff are properly trained on when to use EBP. PPE and hand hygiene supplies should be readily available.
  - Screening tool for SNFs

Enhanced Barrier Precautions

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- Utilizing EBP expands the use of PPE during high-contact resident care activities that can result in the transmission of the organism.
- Examples of high-contact resident care activities include:
  - Dressing
  - Bathing/showering
  - Transferring
  - Providing hygiene
  - Changing linens
  - Changing briefs or assisting with toileting
  - Device care or use: central line, urinary catheter, feeding tube, tracheostomy/ventilator
  - Wound care: any skin opening requiring a dressing

Environmental Services

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- C. *auris* can persist on surfaces in healthcare environments.
- C. *auris* has been cultured from multiple locations in patient rooms, including both high-touch surfaces (bedside tables and bedrails) and surfaces farther away from the patient (windowsills).
- C. *auris* has also been identified on mobile or reusable shared equipment (glucometers, temperature probes, blood pressure cuffs, ultrasound machines, nursing carts, and crash carts).
- Ensuring surfaces are effectively cleaned and disinfected is a major piece of prevention transmission.
- Due to our dry environment using product with long dwell/contact times aren't feasible to use. Make sure you are using products with short dwell times of 1-3 minutes if possible.

Environmental Services

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- Cleaning and disinfection of patient rooms and care areas (e.g. physical therapy) must occur at least daily with the appropriate disinfectant.
- Once a patient is discharged the room and dedicated equipment must be terminally cleaned prior to the use of another patient.
- Clean and disinfect shared or reusable equipment (e.g., ventilators, physical therapy equipment) after each use.
- Label reusable equipment to clearly determine if the equipment is clean or dirty (bags, tags, etc.).
- If staff outside of EVS are responsible for cleaning and disinfection, ensure they are trained and aware of their responsibilities.

Environmental Services

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Ensure all staff are following the manufacturer's directions for surface disinfectants and correct contact time.

- Some products with C. albicans or fungicidal claims may not be effective against C. *auris*.
- CDC recommends using an Environmental Protection Agency (EPA)–registered hospital-grade disinfectant effective against C. *auris*. EPA's List P for C. *auris*.
- If you cannot obtain items on EPA's List P, you can use EPA-registered hospital-grade disinfectant effective against C. difficile spores (List K) for the disinfection of C. *auris*.
- Consider using broad spectrum products in your facility.

Some chemicals may damage equipment. Be sure to check the manufacturer's guidelines on how to clean and disinfect and which chemicals to use or not use to preserve the equipment.

Audits

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- All staff should be audited on their compliance to hand hygiene, donning and doffing of PPE, EVS services, etc.
- Regular audits provides information on the compliance rate of staff and areas of improvement.
- Failure to audit provides a false sense of compliance and assurance.
- Utilize secret shoppers or other methods to observe staff completing their normal practices.
- Provide non-punitive feedback to staff.

Communication

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- When transferring a patient with C. *auris* colonization or infection to another healthcare facility or to another unit within a facility, notify the receiving facility or unit of the patient's C. *auris* infection or colonization status, including recommended Transmission-Based Precautions.
- Utilize an interfacility transfer form to ensure appropriate communication.

Surveillance

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- When notified of a case, surveillance must take place.
- CDC recommends screening:
  - Close healthcare contacts of patients with newly identified C. *auris* infection or colonization.
  - At a minimum, screen roommates at healthcare facilities, including nursing homes, where the index patient resided in the previous month.
  - Consider also screening patients who require higher levels of care (e.g., mechanical ventilation) and who overlapped on the ward or unit with the index patient for 3 or more days.
  - Consider the patient's prior healthcare exposure as they could have been colonized prior to detection.
- Patients who have had an overnight stay in a healthcare facility outside the United States in the previous year, especially if in a country with documented C. *auris* cases.

Surveillance

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- If ongoing transmission is suspected, a point prevalence survey (PPS) may be required by the health department.
- PPS consists of screening every patient on a given unit where transmission is suspected.

Reporting

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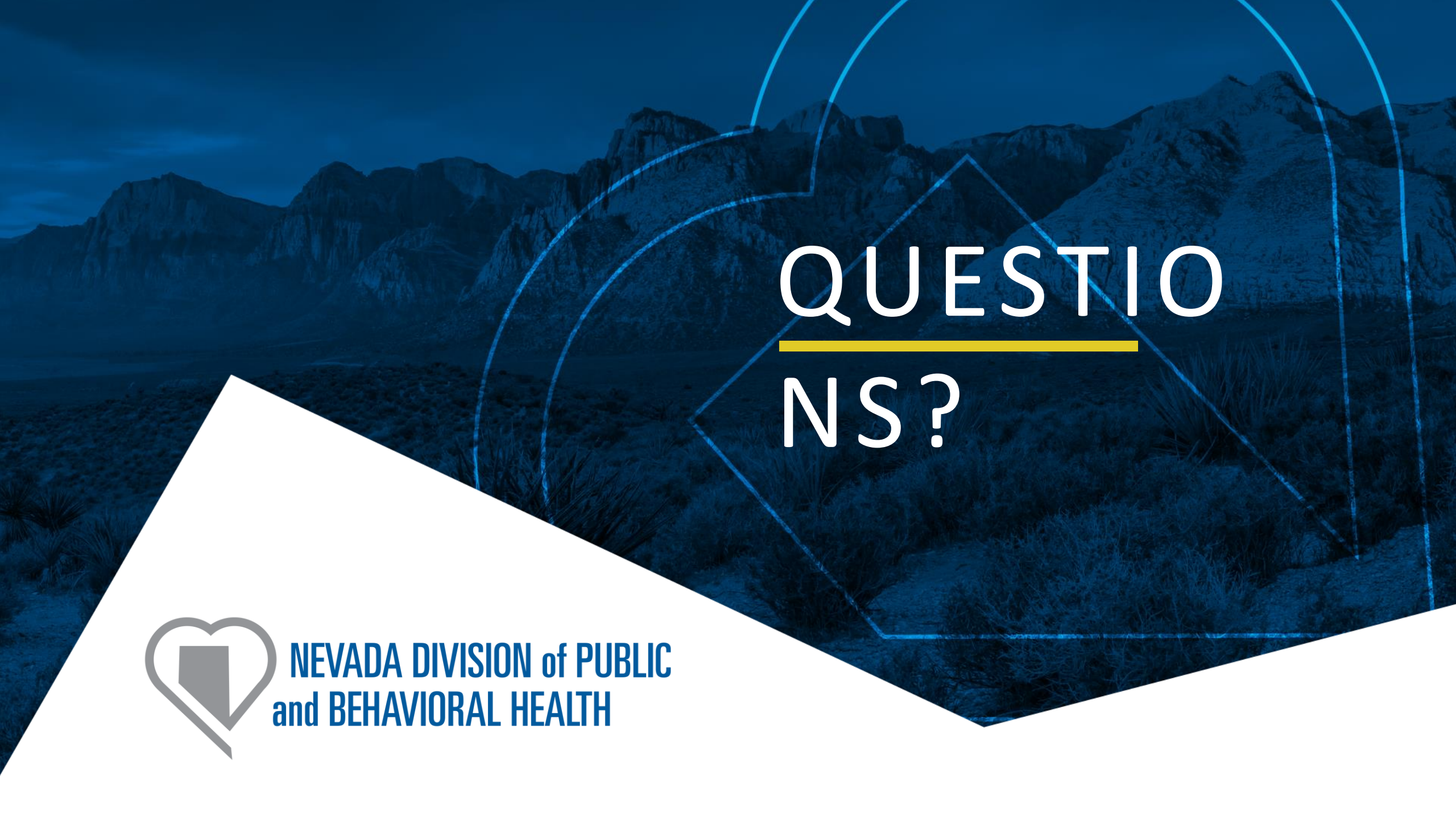
- Report all cases to the HAI Program at outbreak@health.nv.gov
- An HAI staff member will aid with screening, education, and performing gap assessments.
- State infection preventionists are also available for non-punitive onsite assistance.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ACRONYMS

C. *auris*	Candida auris
CDC	Centers for Disease Control and Prevention
EBP	Enhanced Barrier Precautions
EPA	Environmental Protection Agency
EVS	Environmental Services
HAI	Healthcare Associated Infection
ICU	Intensive Care Unit
LTACH	Long-Term Acute Care Hospital
MDRO	Multi-drug Resistant Organism
NSPHL	Nevada State Public Health Laboratory
PPE	Personal Protective Equipment
PPS	Point Prevalence Study
SNF	Skilled Nursing Facility


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